Egg-Box™

USER GUIDE

Revision 04

Please Read All Instructions Carefully Before Using

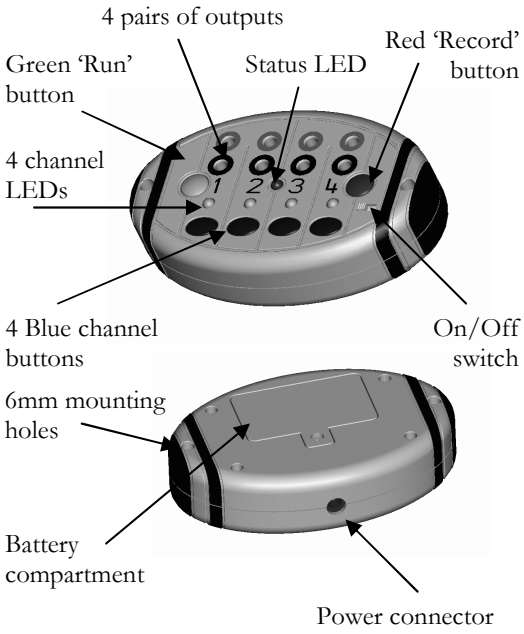
Please retain the information in this User Guide for future reference

⚠ WARNING:
CHOKING HAZARD – Small parts.
Not for Children under 3 years.

Battery precautions

- Batteries should only be fitted by adults
- Only batteries of the same or equivalent type as recommended are to be used.
- Replace batteries when function becomes impaired
- Remove exhausted batteries from your Egg-Box
- Batteries are to be inserted with correct polarity
- Do not short-circuit the battery terminals
- Always dispose of old batteries safely
- Rechargeable batteries are to be removed from your Egg-Box before charging

Getting Started



Batteries

Insert a 9V (PP3 type) battery into the battery compartment. Ensure that it is connected correctly as shown on the cover. Discard any exhausted batteries safely.

Please note that these small batteries cannot provide sufficient power for very bright lights or powerful motors. We recommend you use an external power pack for larger projects.

Programming a sequence

1. Hold down the Red button for 1 second until the Status LED glows red
2. Press the Blue buttons corresponding to the outputs required. The Status LED will flicker and the Channel LEDs above will light up
3. Press Blue buttons again to switch off any required channel
4. You can press several Blue buttons at a time
5. When your sequence is complete, press the Red button again. The Status LED will turn orange
6. A maximum of 64 steps can be recorded

Replaying a sequence

1. Press the Green button
2. The Status LED will turn green and the Channel LEDs will switch on and off in the sequence you have programmed
3. When the sequence is complete, the Status LED will flicker, then the sequence will begin once more
4. To stop the sequence at any time, press the Green button again

Technical specification

- 4 independent channels
- Each channel can drive up to 800mA (depending upon power supply)
- The red connectors are positive (+ve) and the black connectors are negative (-ve)
- Record 64 steps with 1/10th sec accuracy
- Connect motors between 2 red connectors for bi-directional operation
- Remembers sequences even when turned off

Power issues

The internal 9V battery can only supply around 30mA to 50mA in total. As this is what is required by a typical bright light or low-power motor, a larger power supply may be necessary.

This can be provided by using larger batteries such as AA or C size batteries. Connect the pack using the provided battery pack adaptor.

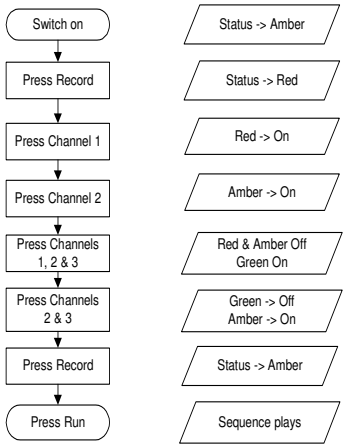
For higher power operation, the mains adaptor can be used. Ensure the lights and motors used are suitable for the power provided.

Accessories available to support this product:

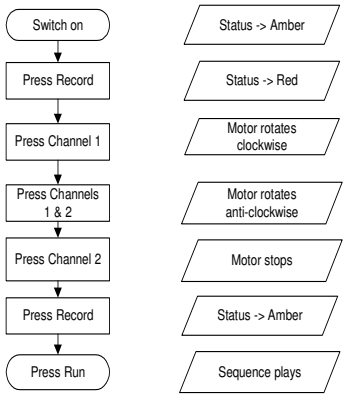
IEGMAINS	800mA 9V UK mains adaptor
IBATAA-6	Holder for 4 'AA' size batteries
IBATC-6	Holder for 4 'C' size batteries
EBAT-A	Pack of 10 'AA' batteries
EBAT-C	Pack of 10 'C' size batteries
EBAT-G	Single 9 volt battery
IEGPOW	High power rechargeable 9V

Examples of use

1. Use the four channels to drive a set of traffic lights. Use channel 1 for Red, 2 for Amber, 3 for Green and use channel 4 to drive a light or buzzer for a pedestrian signal. See if you can program the lights to turn on in the correct sequence.



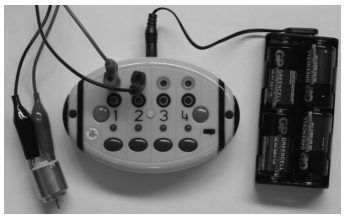
2. Use two channels to drive a motor on a fairground carousel, first one way and then the other. Plug one motor wire into the red connector for channel 1 and the other into the red connector on channel 2. Then program 1 ON and 2 OFF to go one way, then 1 OFF and 2 ON to go the other way. You could also use the other two channels to flash lights on and off as you change the direction of the motor.



3. Build a moving model from wood and dowel, with a motor to drive left wheel and right wheel independently. Fit the Egg-Box onto two vertical pieces of dowel and use Channels 1 and 2 to drive the left motor and channels 3 & 4 for the right. Using all four channels you can make the model:
   a. go forwards (1 & 3 ON)
   b. go backwards (2 & 4 ON)
   c. rotate left (2 & 3 ON) or
   d. rotate right (1 & 4 ON).

   Try to program your moving model to negotiate obstacles!

Wiring a motor with an external battery pack



Support & Warranty

This product is provided with a one-year warranty for problems found during normal usage. Mistreating the Egg-Box or opening the unit will invalidate this warranty.

All out of warranty repairs will be subject to a replacement fee.

Please visit **www.ttseggbox.co.uk** for hints, tips and latest product information.

Email techsupport@ttseggbox.co.uk for technical support.

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